

Fig.4

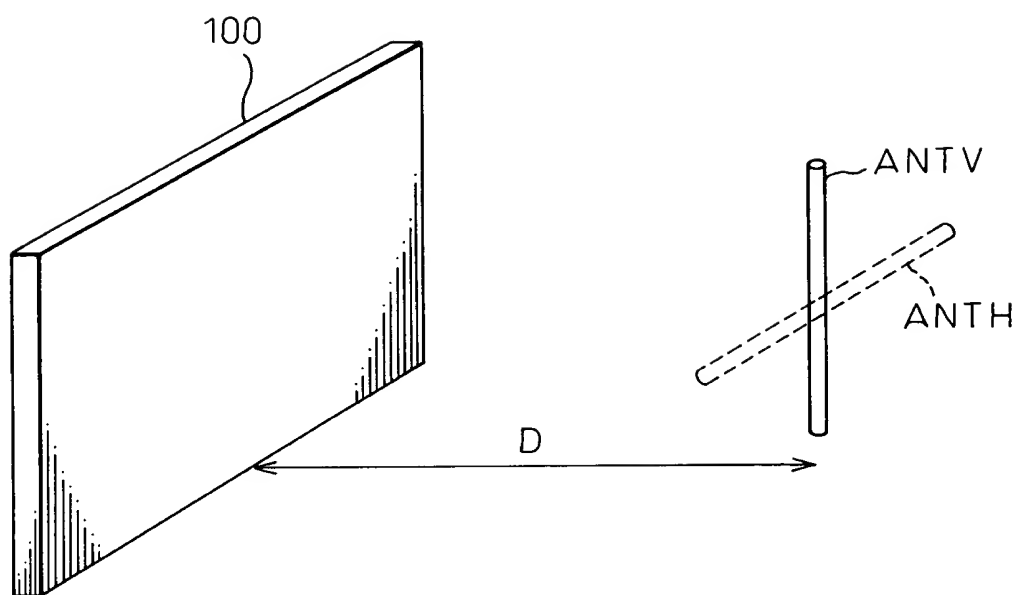


FIG. 4

Fig.5

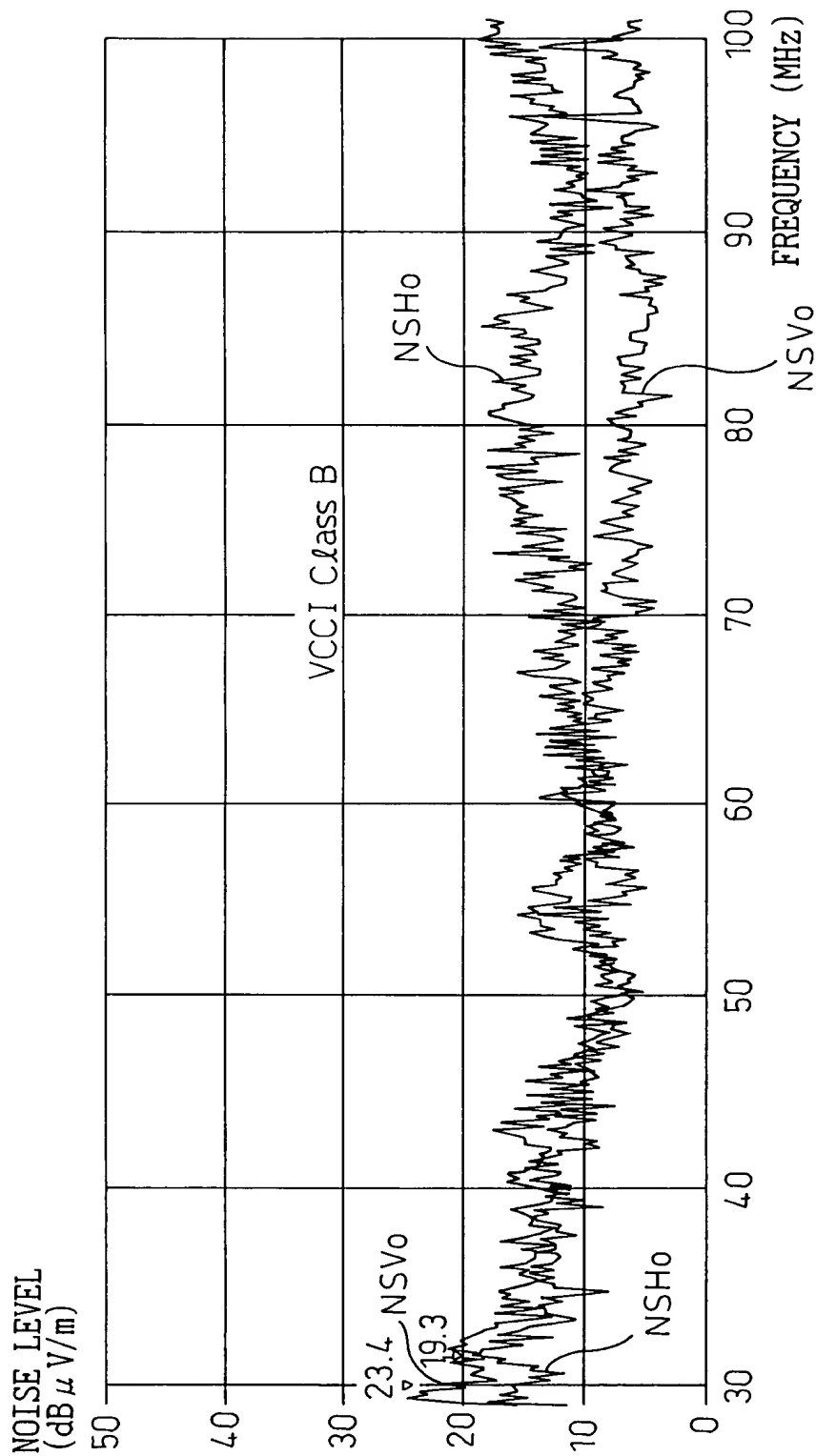


Fig.6

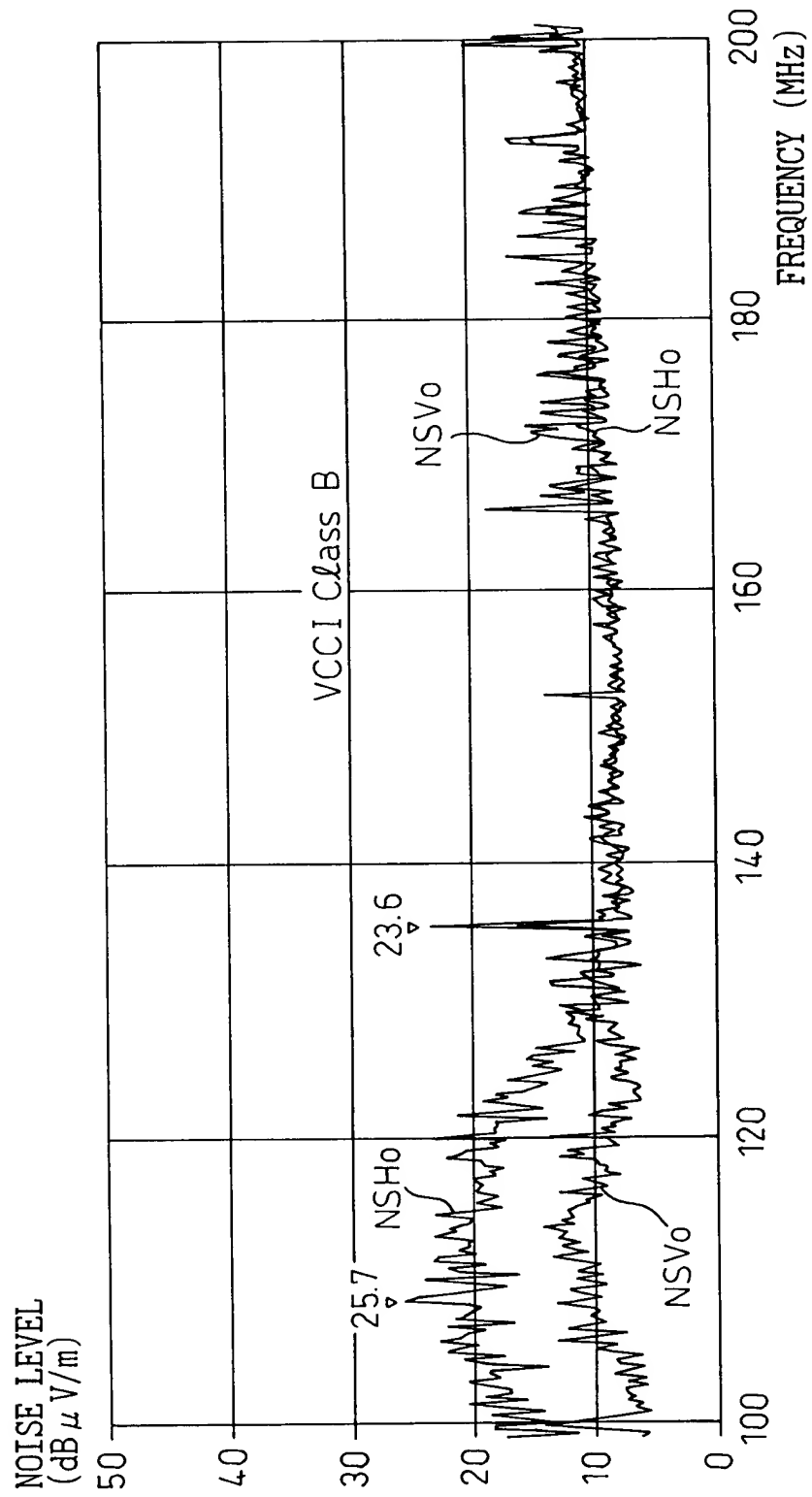
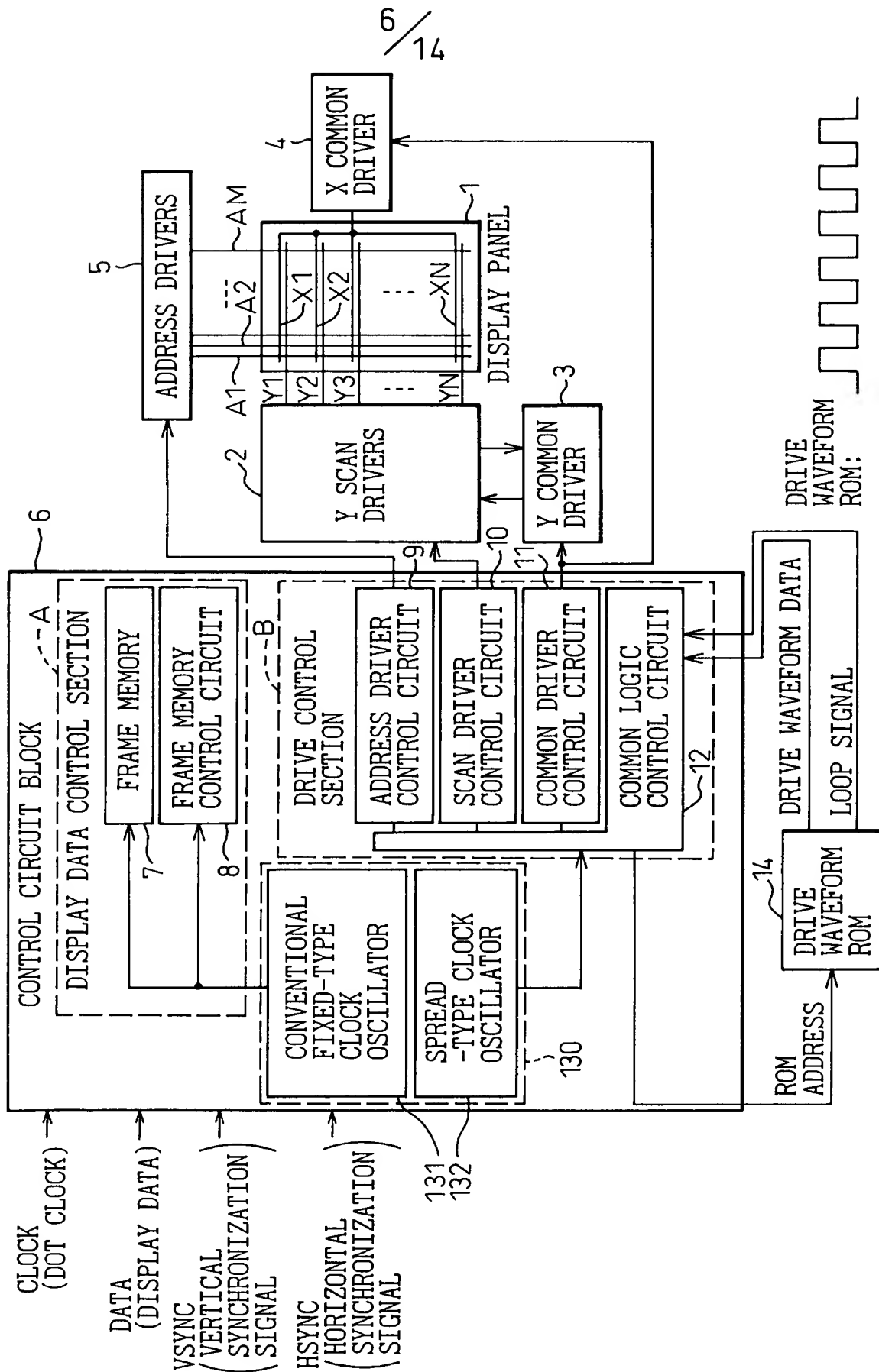


Fig.7



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Fig.8

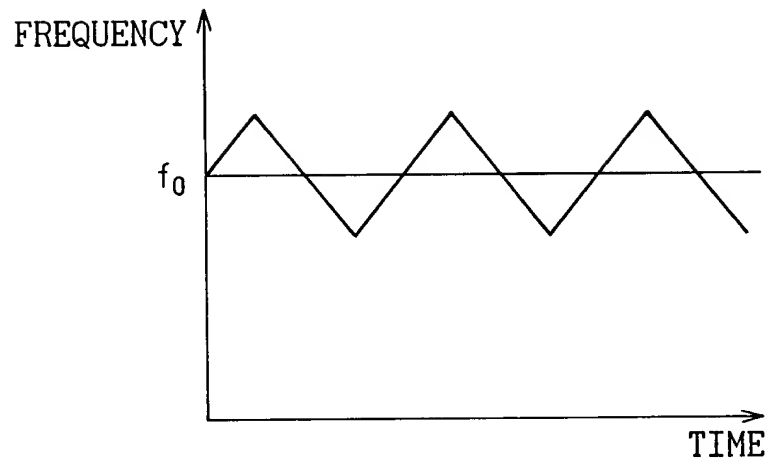


Fig.9

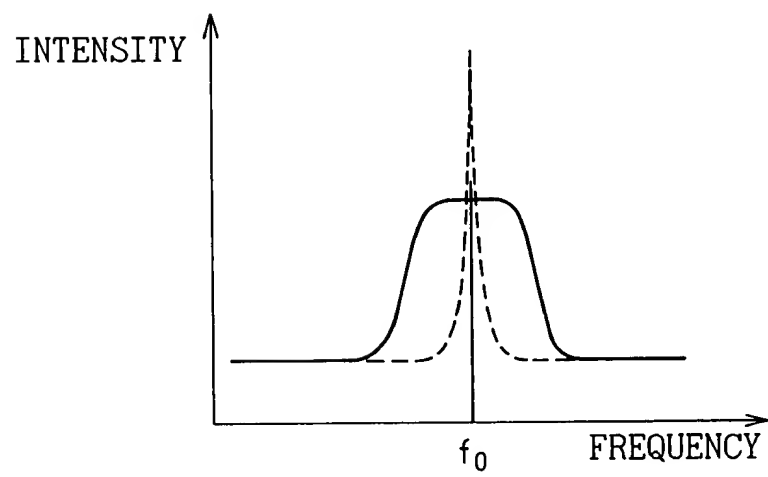


Fig.10

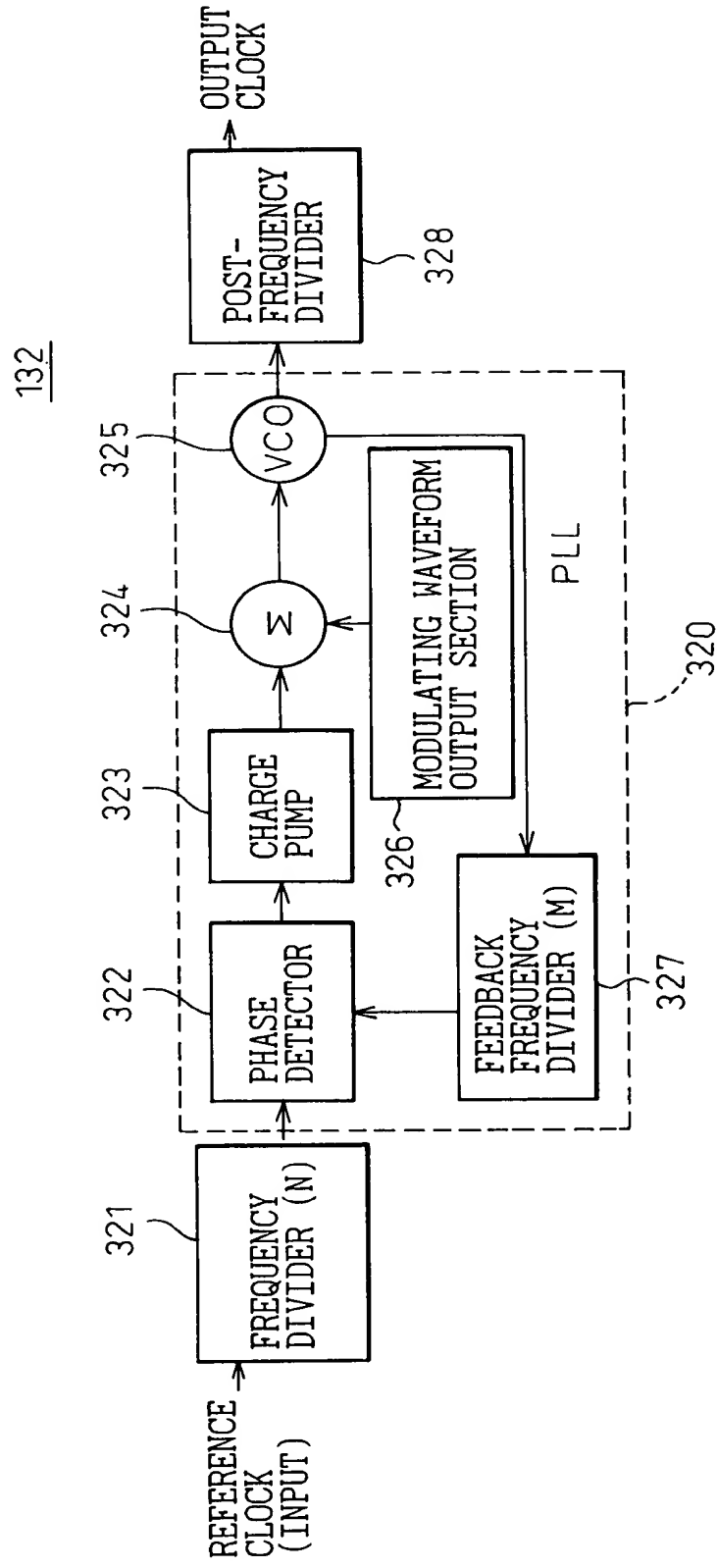


Fig.11

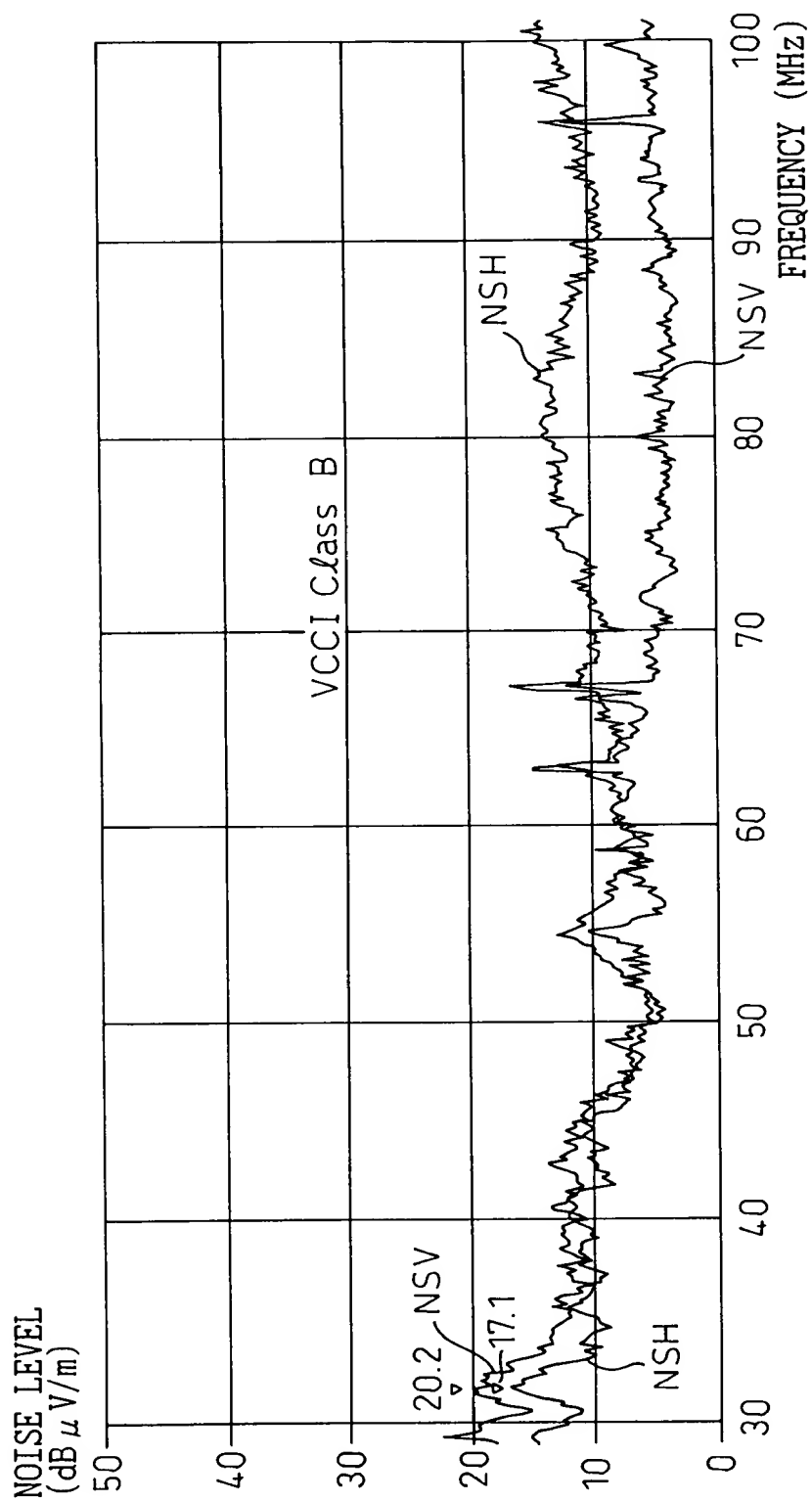
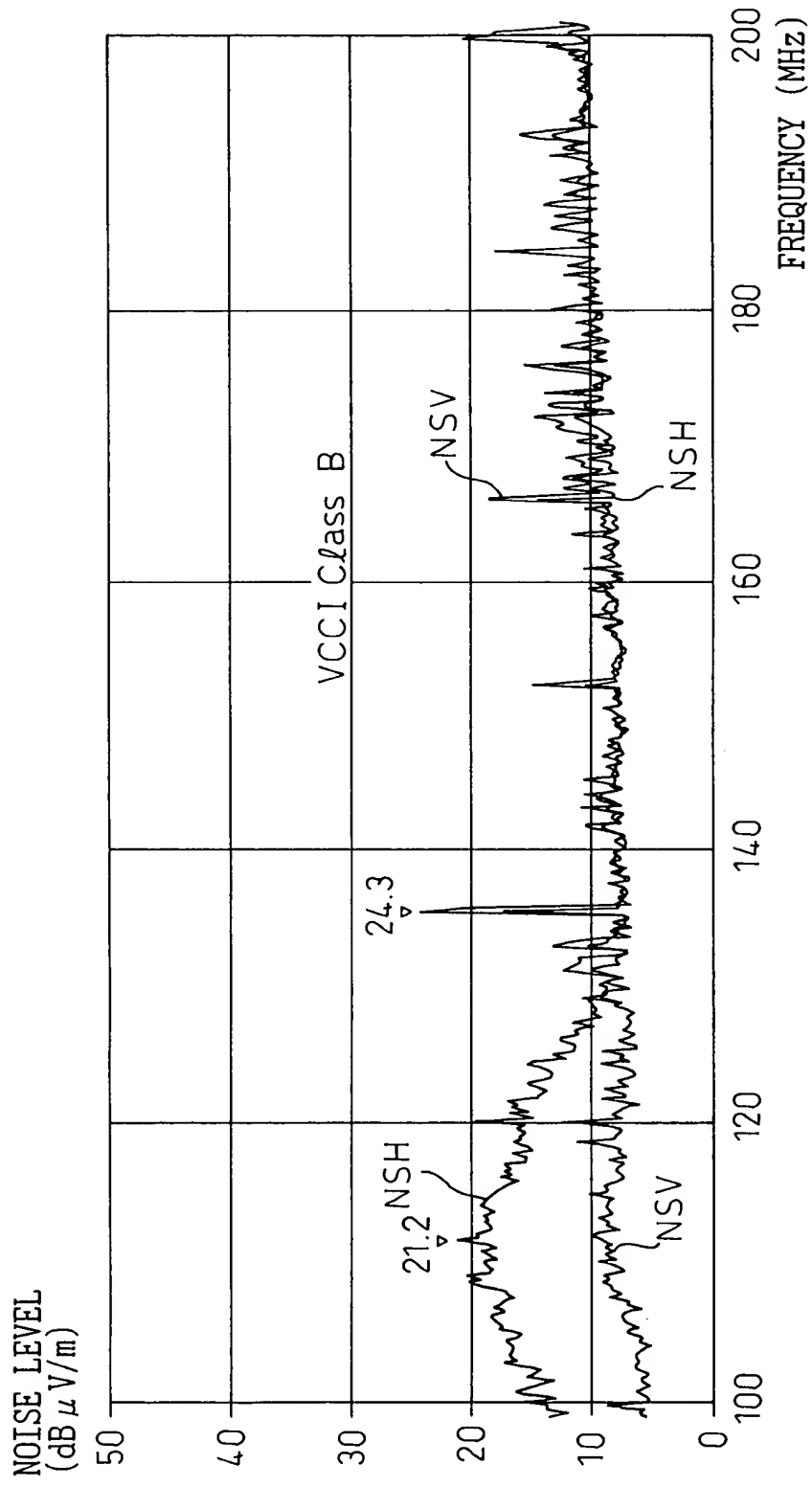


Fig.12



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Fig.13

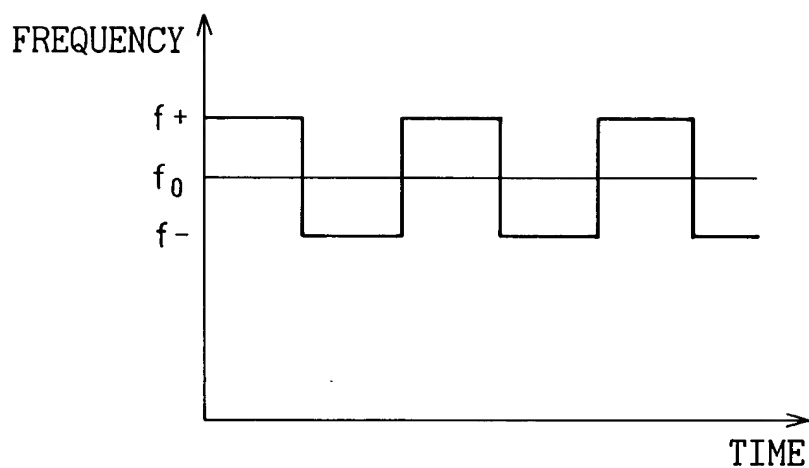


Fig.14

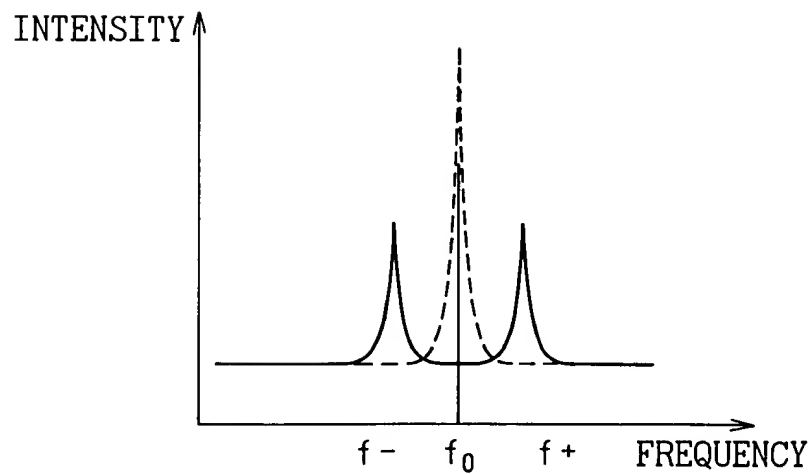
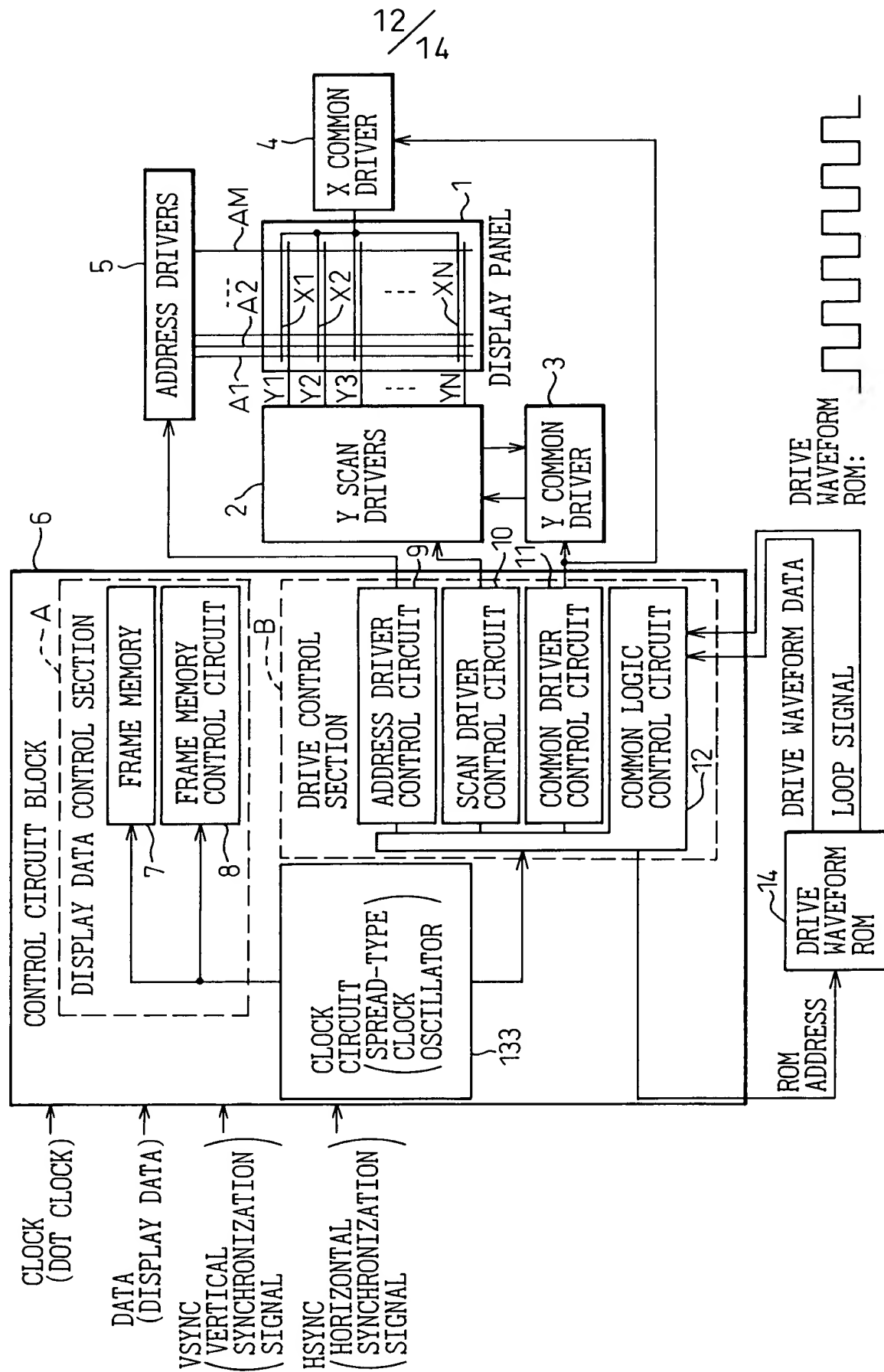


Fig.15



The diagram illustrates the internal architecture of a video display device (6) and its connection to a ROM (14). The video display device (6) is divided into several functional blocks:

- CONTROL CIRCUIT BLOCK (6):**
 - DISPLAY DATA CONTROL SECTION:** Contains FRAME MEMORY (7) and FRAME MEMORY CONTROL CIRCUIT (8).
 - DRIVE CONTROL SECTION:** Contains ADDRESS DRIVER CONTROL CIRCUIT (9), SCAN DRIVER CONTROL CIRCUIT (10), COMMON DRIVER CONTROL CIRCUIT (11), and COMMON LOGIC CONTROL CIRCUIT (12).
 - CLOCK CIRCUIT (CONVENTIONAL FIXED-TYPE CLOCK OSCILLATOR):** Labeled 13, it provides a clock signal (B) to the drive control section.
- ADDRESS DRIVERS (5):** Receive address data (A1, A2, ..., AN) from the address driver control circuit (9) and drive the address lines (A1, A2, ..., AN) of the display panel (1).
- Y SCAN DRIVERS (2):** Receive scan data (Y1, Y2, ..., YN) from the scan driver control circuit (10) and drive the scan lines (Y1, Y2, ..., YN) of the display panel (1).
- Y COMMON DRIVER (3):** Receives common data from the common driver control circuit (11) and drives the common lines (Y1, Y2, ..., YN) of the display panel (1).
- X COMMON DRIVER (4):** Receives common data from the common driver control circuit (11) and drives the common lines (X1, X2, ..., XN) of the display panel (1).
- DISPLAY PANEL (1):** The output device that displays the image based on the signals from the drivers.

The ROM (14) provides drive waveform data (141) and loop signals (140) to the video display device (6). The ROM is organized into BANK AA and BANK BB, with addresses 142 and 141 respectively. The drive waveform data (141) is used by the common logic control circuit (12) to generate the common data signals for the common drivers (3 and 4).

BANK BB:

Fig.17

